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COUNTY COUNCIL

OF

HARFORD COUNTY, MARYLAND

1973 Legislative Session, Legislative Day No. 73-23

Bill No. 73-24 (as amended)

Introduced by ~~XXX~~ Dr. C. Joseph Bernardo

~~XX XXCT~~
AN EMERGENCY ACT to repeal Ordinance 10 of Harford County, Maryland, for the regulation of private waste disposal systems, and to add new Section 453 to the Code of Public Local Laws of Harford County (1965 Edition, as amended) to follow immediately after Section 452, and to be under the new title, "Private Waste Disposal Systems"; to provide for the regulation of private waste disposal systems, sanitary construction permits and inspection; to require a minimum reserve lot area for waste disposal based on public sewer priority; to provide for variances in certain design criteria; to provide for penalties for violation thereof and generally relating to the control of installation and operation of private waste disposal systems.

By the Council August 7, 1973

Introduced, read first time, ordered posted and public hearing scheduled on September 6 1973, at 7:30 .M. in the Council Hearing Room, Bel Air, Maryland.

By order, Imogene B. Johnston, Secretary

PUBLIC HEARING

Having been posted and Notice of time and place of hearing and Title of Bill having been published according to the Charter, a public hearing was held on September 6, 1973, and concluded on September 6, 1973.

Imogene B. Johnston, Secretary

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Section 1. Be It Enacted by the County Council of Harford County, Maryland, that Ordinance 10 enacted by the County Commissioners of Harford County be, and it is hereby, repealed and that new Section 453 be, and it is hereby, added to the Code of Public Local Laws of Harford County, (1965 Edition, as amended), title, "Private Waste Disposal Systems", and all to read as follows:

453. Private Waste Disposal Systems.

(a) (1) The "approving authority" shall be the Health Officer of Harford County or his duly appointed representative as designated by the Secretary of Health and Mental Hygiene. The term "approved" or "approval" always refers to the approval of the approving authority.

(2) The term "person" shall mean a person, persons, partnerships, firms, corporations and cooperative enterprises.

(3) All persons, firms or corporations who construct dwellings, stores, offices, factories or any other building which will have human occupancy or any additions to existing buildings shall, in the absence of a public sanitary sewer, be required to install a private waste disposal system OR ADD TO THE EXISTING SYSTEM in accordance with the following specifications, as stated herein, before said structure shall be occupied.

(4) On and after the effective date of this law, any person planning to install a private waste disposal system, or make additions to or alterations to an existing system, shall obtain a SANITARY CONSTRUCTION permit before starting work on such system from the approving authority. The length of time a permit is to be effective shall be specified in the permit and shall not exceed one (1) year. Said permit shall become inoperative at the expiration of the period of time prescribed, without notice to that effect having been given by the approving authority.

(5) To obtain such a permit, the owner of the property or his agent must provide information to the approving authority

as to the location of the property, size of the lot, plot plan, nature and size of the building, results of soil percolation tests WHEN NECESSARY and location of existing or planned water supplies or systems on an application form obtainable from the Health Department.

(6) The approving authority shall have the right to refuse any permit for the installation of a private sewage disposal system if the plans, soil percolation test or other such pertinent data are not in accordance with the requirements as herein set forth.

(7) No private waste disposal system shall be constructed on a property accessible to an existing public sanitary sewer~~, .~~ ~~or in a designated immediate priority area.~~ A private waste disposal system found to be malfunctioning where public sanitary sewer is available shall be abandoned, and the building sewer connected to the public sanitary sewer.

(8) All new work, and such portions of existing systems as may be affected by new work or any changes, shall be inspected by the approving authority or his representative to insure compliance with all the requirements of this regulation and to assure that the installation and construction of the disposal system is in accordance with the approved plans. Advance notice is required in order to receive the necessary inspection, AND THE INSPECTION SHALL BE MADE WITHIN TWENTY-FOUR (24) HOURS DURING THE NORMAL WORK WEEK.

(9) Upon final inspection and approval, each person shall be responsible to backfill the private sewerage disposal system within seventy-two (72) hours. No system will be backfilled or covered until the approving authority has given written approval. Any part of an installation which has been covered prior to final approval shall be uncovered upon order of the approving authority.

(10) All new work and such portions of existing systems as may be affected by new work or any changes or additions shall be performed by a Harford County licensed plumber and/or a bonded drainlayer. A homeowner may be permitted to do his own work according to the requirements of this Ordinance at the private home where he resides or plans to reside, provided that, such work shall be inspected and approved by the approving authority. The approving authority shall refuse to issue permits and conduct inspections for any Harford County licensed plumber, bonded drainlayer or owner who has willfully or knowingly violated the provisions of this Ordinance until the violation has been corrected or resolved.

(11) Any person failing to complete the construction of a private waste disposal system to the satisfaction of the approving authority shall be liable for the penalty outlined in subsection (m) of this subtitle.

(12) Building contractors, waste disposal system contractors, and plumbers shall be jointly and severally responsible for compliance with these regulations with any person for whom such installations are being made.

(13) The basic requirements of this subtitle are to serve a single family dwelling. Multi-family units, commercial units and other non-domestic unit requirements are calculated individually, based primarily on water usage and other requirements of this subtitle. The lot areas delineated in this subtitle are not applicable to commercial lots, multi-family units and other non-domestic units.

(14) Where a private waste disposal system is to be used, the system shall consist of a septic tank (or other private disposal system as may be approved by the approving authority) with the effluent discharging into a subsurface tile drainage field, deep trench or seepage pit (dry well) or such other

system approved by the approving authority.

(15) After the initial installation of a private individual waste disposal system, the property owner shall be responsible for maintenance of the system. When a private waste disposal system is found to be malfunctioning and public sewerage is not available, the property owner or his agent shall upon notification from the approving authority be responsible for all required corrective procedures and repairs to the system within a time period specified by the approving authority. In cases where waste disposal systems other than septic tank systems are installed, asservice policy shall be required by the approving authority and shall be for the life of the system; the requirements shall be set according to the system and/or model to be used.

(16) Private waste disposal systems will not be installed in unsettled filled ground, as determined by the approving authority; ~~areas subject to flooding -areas previously flooded,~~ IN 100 YEAR FLOOD PLAIN AREAS, or on slopes in excess of twenty ~~degree (20°)~~ PERCENT (20%) grade. No portion of a private waste disposal system will be covered by driveways, swimming pools, building additions or any other permanent structures, except that cast iron building sewer may be placed under driveways, (See (d) (1)).

(17) Due to the variability of soil conditions, water tables and individual use experience, approval of a private waste disposal system does not in any manner give or imply a guarantee that the system will operate satisfactorily for any set period of time.

(18) Any duly authorized representative of the Health Department may enter and inspect any property, premise or place, at any reasonable time for the purpose of investigating any alleged violation of any provision of this subtitle. No person

shall refuse entry or access to any authorized representative of the Health Department who requests entry for the aforementioned purpose, and who presents appropriate credentials; nor shall any person obstruct, hamper or interfere with any such inspection or investigation.

(b) (1) Design - The design of private (individual) waste disposal systems shall take into consideration the location with respect to private and municipal ~~drinking water~~ POTABLE WATER SUPPLY wells and water systems or any other source of water supply, topography, water table, soil characteristics, available area and maximum occupancy of the building. There shall be provision to accommodate adequate replacement systems until public sanitary facilities are available. (See (e) (8)).

(2) Type of System - The type of private waste disposal system to be installed shall be determined on the basis of soil permability, topography, and water tables.

(3) Sanitary Sewerage - The private waste disposal system shall be designed to receive all sanitary sewerage, including laundry waste, from the building. Kitchen disposal systems (garbage grinders) will not be permitted to discharge into a private waste disposal system. Drainage from basement floor, footings, water conditioners, or roof gutters shall not enter the waste disposal system.

(4) Discharge - The private waste disposal system shall consist of a septic tank or other approved treatment device, discharging into either a shallow subsurface disposal field, deep trench, one (1) or more seepage pits, or into a combination of them or such other approved system.

(5) Grease Traps - Grease traps are not necessary for installations at private dwellings, If included in the design of the private waste disposal system it shall be installed on the kitchen line, outside of the building, before entering

the building sewer leading to the treatment device. The trap shall be provided with a removable cover to permit access for removing the accumulated grease. The minimum liquid capacity shall not be less than thirty (30) gallons.

(c) (1) Location - The initial private waste disposal system and replacement system shall be located as specified by the Health Department. The system is normally a gravity system located ~~in the downward slope~~ ON THE LOWER SIDE of the lot in the area where the percolation test was taken and approved by the Health Department.

(2) Distances - Table I provides for the minimum distances that shall be observed in locating the various components of the waste disposal system.

(d) Building Sewer

(1) The building sewer which extends from approximately five (5) feet beyond the foundation wall shall be connected to the treatment device by cast iron pipe which shall be a minimum of four (4) inches in diameter.

(2) Slope of the building sewer, ten (10) feet preceding the treatment device shall not exceed one-half (½) inch per foot.

(3) Building sewer is to be cast iron pipe. All joints to be sealed in an approved method as prescribed within Ordinance 28 (Plumbing Code).

(4) The building sewer should have a straight alignment and bends are to be avoided wherever possible. Change in direction, horizontal or vertical, shall be made by use of long radious one-fourth (1/4), one-eighth (1/8) or one-sixteenth (1/16) bends, or Y-branches.

(5) Where the building sewer is greater than seventy-five (75) feet in horizontal drainage, a cleanout shall be required.

(6) Cleanouts shall be installed at each change of direction of the building sewer greater than forty-five degrees (45^{o}).

(7) Cleanouts, when installed on an underground drain, shall be extended to or above the finished grade on either a forty-five degree (45^{o}) or ninety degree (90^{o}) plane.

(8) Cast iron pipe shall be used for a cleanout pipe of the same nominal size in the drainage system. Cleanout plugs shall be of brass.

(9) The building sewer shall in all cases be below the water supply line as required in Section 38.06, Ordinance 28 (Plumbing Code).

(e) Percolation Test

(1) Percolation tests are required to determine the absorptive capacity of the soil. All percolation tests shall be performed under the supervision of the Health Department on all lots where a private waste disposal system is required. Percolation tests will be conducted in the area as designated by the approving authority. Tests shall be made in sufficient number and at such locations to assure a reliable determination of subsurface conditions.

(2) When shallow subsurface irrigation (drainfield) is contemplated, ~~two (2) test holes approximately fifty (50) feet apart shall be prepared as follows:~~ ONE (1) TEST HOLE OR SUCH ADDITIONAL TEST HOLES IN NUMBERS AND LOCATIONS AS MAY BE REQUIRED TO ASSURE RELIABLE DETERMINATION OF SUBSURFACE CONDITIONS SHALL BE PREPARED AS FOLLOWS:

(i) The test holes shall be prepared by digging two (2) foot square holes two (2) feet in depth. At the time of conducting the percolation tests, a hole one (1) foot square by one (1) foot deep shall be prepared within the previously dug two (2) foot square hole. Upon completion of the percolation

test, the soil will be checked to a depth of at least three (3) feet below the proposed system to determine the presence of water tables and the depth of porous soil.

(ii) When a deep subsurface disposal system (deep trench or seepage pits) is contemplated, ~~two (2) test holes approximately fifty (50) feet apart shall be prepared as follows:~~ ONE (1) TEST HOLE OR SUCH ADDITIONAL TEST HOLES IN NUMBERS AND LOCATIONS AS MAY BE REQUIRED TO ASSURE RELIABLE DETERMINATION OF SUBSURFACE CONDITIONS SHALL BE PREPARED AS FOLLOWS:

(iii) The test holes shall be prepared of such a size as to permit a man to enter the pit with a reasonable degree of safety. The depth of the test pit shall be sufficient to reach porous soil. In the bottom of this pit a one (1) foot square hole one (1) foot deep shall be prepared. Upon completion of the test, further excavation shall be required to an approximate depth of four (4) feet below the proposed system to determine the presence of the water table and the depth of porous soil. The bottom of the seepage pit or trench shall be four (4) feet above the established water table. Only the porous absorption area of the test pit shall be considered in calculating the size of the system to be installed.

(3) A soil test consists of a two (2) inch drop of water level. The first inch which is considered the presoaking time shall not exceed twenty (20) minutes.

(4) The time taken for the second one (1) inch drop is the recorded percolation test and is used in calculating the amount of square feet of absorption area that shall be required per one hundred (100) gallons of sewage effluent to be disposed. The second one (1) inch drop shall not exceed thirty (30) minutes.

(5) The satisfactory soil test includes the following consideration: rate of water absorption, usable area, other

nearby failing percolation tests, slope, size of initial system necessary, sufficient area for replacement systems, failing private systems in the area, and other related factors. The approving authority may require that soil tests be conducted during certain periods of the year when moderate to severe conditions are expected according to the Harford County Soil Survey, Maps and Interpretations as prepared by the U. S. Department of Agricultural, Soil Conservation Service.

(6) Percolation tests may be generally considered invalid at any time whenethe approving authority has knowledge which indicates the test results are no longer accurate or test procedures have been altered sufficiently to render a significant change in the results. Additional percolation tests may be required.

(7) After thorough soil testing of a parcel of ground and on finding the soil unsuitable for a private waste disposal system, the approving authority may consider such a parcel unsuitable for a private waste disposal system and may refuse to conduct additional soil tests.

(8) Effluent Seepage Area Requirements - The total seepage area required shall be governed by the ~~suitability of soil conditions and topography.~~ FUTURE AVAILABILITY OF PUBLIC SEWERAGE. In the absence of public sanitary facilities and with favorable soil conditions, the following minimum effluent seepage areas will be required to be reserved for the use of the initial private waste disposal system and for subsequent expansion of the system should expansion prove necessary.

Minimum Area of Lot Reserved for Waste Disposal	Public Sewer Priority
10,000 square feet (original system + space for correction)	Immediate - 10 years
20,000 square feet (original system + space for two (2) replacement systems)	10 year - 30 year
40,000 squareffeet (original system + space for three (3) or more replacement systems)	Beyond 30 year Sewer Plan

(9) Commercial lots, multi-family lots and other non-domestic lots may be required to reserve a greater minimum based upon their individual requirements.

(f) Septic Tanks

(1) No septic tank shall serve more than one (1) single family dwelling or building for commercial use unless authorized by the Health Department.

(2) Capacity - The capacity of the septic tank shall be in accordance with Table II.

(3) Length - Septic tanks, up to one thousand (1,000) gallon capacity, shall be twice as long as they are wide. ~~and shall be rectangular in shape.~~ Larger tanks may be more than twice as long as wide, and shall be rectangular in shape.

(4) Depth - Minimum liquid depth for any size shall be forty-eight (48) inches. The space between the fluid level and the top of the tank shall be at least eight (8) inches.

(5) Construction - Septic tanks shall be constructed of corrosion-resistant materials.

(6) Steel tanks shall meet the U. S. Department of Commerce Commercial Standard 177-51. The metal used in steel tanks shall not be less than fourteen (14) gauge for steel

tanks one thousand (1,000) gallons or less. They shall be coated inside and outside with asphalt coating or other acceptable materials.

(7) Precast tanks shall be of vibrated reinforced concrete with a minimum wall thickness of three (3) inches.

(8) Manholes - The inlet compartment must be provided with a manhole which shall be at least twenty (20) inches square, with the opening to expose at least six (6) inches inside the inlet baffle.

Where removable slabs are provided on precast concrete tanks, the provision for installing a six (6) inch pipe to grade level shall prevail.

(9) Baffles - Baffles shall be installed no less than eight (8) inches from the end walls and shall extend at least six (6) inches above the flow line. The inlet baffles shall extend twelve (12) inches below the flow line and the outlet fifteen (15) to eighteen (18) inches below the flow line. (On precast or poured concrete tanks, baffles shall be of six (6) inch cast iron sanitary tees or precast or poured reinforced concrete.)

(10) Invert - The invert of the inlet pipe shall be three (3) inches higher than the invert of the outlet pipe.

(11) Septic Tank Standpipe - The septic tank standpipe will be inserted in the hole provided in the septic tank and extend to the surface of the ground as represented by the final grade. The standpipe extension will be six (6) inch steel or cast iron pipe with a tight fitting cap.

(12) Installation - The septic tank shall be installed in such a manner that the top shall not be more than twenty-four (24) inches below the finished grade. Plumbing elevations must be carefully planned to fulfill this requirement.

(13) The septic tank shall be set level and filled

with water or the void space around the tank shall be compacted with fill to prevent the tank from floating.

(14) Alterations or changes in septic tank construction shall be approved by the approving authority.

(15) All voids, joints and openings shall be properly sealed to make the septic tank watertight, prior to final inspection.

(g) Distribution Box

(1) A distribution box or boxes shall be required for all trench type systems (shallow or deep) and/or when two (2) or more seepage pits (drywell) are installed.

(2) Location - The distribution box shall be located on solid ground at least five (5) feet from the septic tank and a minimum of six (6) feet from any seepage area.

(3) Construction - The distribution box shall be of watertight construction from either brick, concrete (formed) or concrete block (parged) with a removable top.

(4) Invert Level - The invert of the inlet pipe shall be located two (2) inches above the invert of the outlets to each distribution line.

(5) Baffle - Every distribution box shall have a baffle at least six (6) inches high and extending two-thirds (2/3) across the bottom with equal open spaces between ends of baffle and sidewalls of the box. The baffle shall be firmly set on the bottom of the box, shall be placed at right angles to the direction of the incoming flow, and shall be placed a minimum of six (6) inches from the inlet.

(6) Connections - The distribution box shall be connected to the septic tank or other treatment device by a four (4) inch cast iron pipe with a watertight seal at both ends. A watertight four (4) inch solid pipe shall be used to convey the septic effluent from the distribution box to the

absorption area. All connections to the distribution box shall be sealed to prevent any seepage from the box. All outlet ports not used shall be properly plugged and sealed with concrete to the wall thickness of the box.

(h) Disposal Field

(1) Minimum Standards - The minimum standards for the construction of all subsurface drainage disposal systems shall be shown in Table VI.

(2) Size and Requirements - Size requirements for subsurface drainage disposal systems shall conform to Tables III & IV.

(3) Disposal trenches (shallow or deep) shall be designed and constructed on the basis of the percolation test and the required effective absorption area approved by the Health Department. Each disposal trench shall be connected by a watertight line from the distribution box to the trench. There shall be a minimum of six (6) feet of solid ground between the distribution box and the beginning of the trench. No disposal trench shall be subdivided. Pressure systems using force pumps shall be of the manifold type from the dumping chamber to the distribution box or boxes.

(4) Filter Material - The filter material shall not be less than twelve (12) inches in depth below the drain tile and shall extend the full width of the trench. After installation of the drain tile, additional filter material shall be placed surrounding and over the drain tile to a depth of not less than two (2) inches. Filter material shall consist of washed gravel, crushed stone, or like materials, ranging in size from one-half (1/2) inch to two and one-half (2 1/2) inches in diameter, and free of all fines, dusts, ashes, clay and other debris.

(5) Filter Material Cover - Filter material cover may consist of hay, straw, red resin or building paper the width and

length of the trench. Asphalt treated paper shall not be used.

(6) Backfill Material - Backfill material shall be select earth-fill and to be free of clay inert.

(7) Deep Disposal Trenches - Deep disposal trenches may vary from four (4) feet depth to about fourteen (14) feet in depth. The standard depths are eight (8) feet, ten (10) feet, and twelve (12) feet. The trench filler material, (see (h)(4)), is used from just above the level of the pipe to the bottom of the trench. A typical ten (10) foot trench would consist of eight (8) feet of crushed stone, perforated pipe or tile, (see (h)(8)), is located in the top two (2) inches of stone covered by a filter material cover, (see (h)(5)), and the backfill material, (see (h)(6)).

(8) Tile Field - The tile fields shall be constructed of twelve (12) inch lengths of four (4) inch agricultural or cement drain tile, or standard sections of plastic pipe or other approved materials. The twelve (12) inch tiles shall be spaced not less than one-eighth (1/8) inch and not more than one-fourth (1/4) inch apart and the upper half to be capped by asphalt treated paper in strips four (4) inches in width by ten (10) inches in length. The perforated pipe shall be installed in such a manner that the holes will be downward at the 4 o'clock and 8 o'clock position. Disposal field trench bottom and tile and pipe shall have a maximum slope of four (4) inches per one hundred (100) foot of trench length, (see (h)(4),(5),(6)).

(i) Seepage Pit (Drywell)

(1) Seepage Pit - Seepage pits may be used when approved by the Health Department either to supplement the subsurface disposal field or in lieu of such disposal field where soil conditions and topography favor the operation of such pits. The minimum standards for the construction of seepage pits shall be shown in Table VI.

(2) Size - The capacity of a seepage pit is to be computed on the basis of an approved percolation test in accordance with requirements as specified in Section (e)(1). The dimensions specified are the inside block wall diameter under the inlet pipe. (See Table V).

(3) Seepage Pit Construction - Pits are to be circular in plan, The Vertical wall of non-drilled pits shall be lined with eight inch by eight inch by sixteen inch (8" x 8" x 16") or longer cinder, slag or concrete blocks, laid up dry with open joints from the bottom to the inlet pipe. The core of the block shall be in the vertical position. The joints above the inlet pipe to the cover shall be sealed with mortar cement. Where two (2) or more drywells are used, the separation shall be a minimum of three (3) times the diameter of the largest drywell.

(4) Filter Material - The annular space between the original soil and the vertical block wall of the non-drilled drywell shall be filled with a filter material of either washed gravel, crushed stone or like material that has been approved. This material shall extend from the bottom of the pit to the bottom of the inlet pipe. This paragraph does not apply to bored seepage pits where the block fit tight against the side wall.

(5) Filter Material Cover - (see (h)(5)).

(6) Backfill Material - (see (h)(6)).

(7) Seepage Pit Cover - A reinforced concrete cover, a minimum of five (5) inches in thickness shall be required. A six (6) inch diameter hole shall be provided to accommodate a six (6) inch iron or steel pipe.

(8) Seepage Pit Cleanouts - The cleanout shall extend to finish grade and be provided with a tight fitting cap.

(j) Other Methods of Effluent Disposal

In any instance where sewage effluent from an individual

waste disposal system is to be discharged onto the surface of the ground or into the waters of the State, final approval of the proposal, including the issuance of a point of discharge, shall be ~~issued by~~ SUBJECT TO THE POLICIES OF the Maryland State Department of Health & Mental Hygiene.

(k) Privies

New privies can be approved where conditions prohibit underground sewage disposal for structures with intermittent, temporary or seasonal use. They will not be approved for new buildings with permanent full time occupancy. Any new privies or rebuilt existing privies require a Sanitary Construction Permit, and when constructed must be inspected and approved by the approving authority.

(l) Variances.

Provision for flexibility in certain design criteria necessitated by unusual circumstances or select changes in design may be accomplished on written approval of the approving authority.

(m) Severability

If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any Court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions thereof. This subtitle is supplementary to, but does not supersede, the regulations of the State Board of Health.

(n) Penalty

Any person found guilty of violating any provision of this Ordinance shall be deemed guilty of a misdemeanor and shall be fined not less than Fifty Dollars ($50.00) and not more than Two Hundred Fifty Dollars ($250.00) and every day such

violation exists shall constitute a separate offense and be punishable as such hereunder.

~~(o) Annexes---(see page 17)~~

(o) EFFECTIVE DATE

ANY PRELIMINARY PLAN OR RECORD PLAT OF A SUBDIVISION OR APPROVED INDIVIDUAL LOT WHICH HAS BEEN SUBMITTED TO THE APPROVING AUTHORITY PRIOR TO THE DATE OF ADOPTION OF THIS LAW, SHALL NOT BE REQUIRED TO COMPLY WITH SEEPAGE AREA REQUIREMENTS OF THESE REGULATIONS IF FINAL APPROVAL AND RECORDATION, WHERE REQUIRED BY LAW, IS COMPLETED NO LATER THAN TWELVE (12) MONTHS FROM THE DATE OF ADOPTION, HOWEVER, ANY APPLICATION RECEIVED AFTER THE ADOPTION OF THIS LAW MUST COMPLY WITH THESE REGULATIONS.

~~(o)~~ (p) Annexes

TABLE I

MINIMUM DISTANCES FOR

LOCATION OF COMPONENTS OF PRIVATE

SWASTE DISPOSAL SYSTEMS

	Shallow Well & Springs (feet)	Drilled Well (feet)	Water Supply Line (feet)	Building Foundation (feet)	Property Line (feet)	Stream (feet)	Swimming POOL (feet)
Building Sewer*(1)		50	10		15		
Septic Tank*(2)	100	50		20	15		20
Distribution Box	100	60		25	15		25
Disposal Field	100	75		30	15	100	30
Seepage Pits	100	75		30	15	100	30

*(1) Where building sewer is less than fifty (50) feet from a water supply, the building sewer shall be cast iron pipe with approved joints.

*(2) Depending upon the topography of the building lot, the sewage system can, on approval from the Health Department, be located closer to the building foundation.

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~~(p)~~ (q)

TABLE II

CAPACITY OF SEPTIC TANKS

A minimum capacity for a septic tank serving a single family dwelling shall provide for the treatment of sanitary sewerage as defined under paragraph (f).

Number of Bedrooms	Liquid Capacity of Tank Requirement
1 & 2	750
3 & 4	1000
5	1250
6	1500

For each additional bedroom beyond six (6), add two hundred fifty (250) gallon to the liquid capacity requirement.

~~(q)~~ (r)

TABLE III

DEEP DISPOSAL TRENCH SYSTEMS

Time In Minutes for One Inch (1") Drop	Effective Absorption Sidewall Area Per 100 Gallons/Square Feet *(1)**(2)
1-5	350
6-10	400
11-15	500
16-20	625
21-30	775

*(1) Effective absorption area for each 100 gallons of sewage per day - 2 persons/bedroom and 75 gallons/person/day.

**(2) Effective sidewall area = vertical depth of sidewall area below percolation or porous soil to bottom of trench.

Example: 3 bedroom = 6 persons X 75 gallons/day = 450 gallons/day.

10 min. percolation = 400 square feet X 4.5 gallons/square feet = 1800 square feet of absorption area required.

1800 square feet ÷ 16 square feet (sidewall area) = 113 lin. feet of 10 foot deep trench required. (Additional length may be required if porous soil starts at greater depth.)

Note: 12 sq. ft./lineal ft. is max. possible for 8' deep trench.

16 sq. ft./lineal ft. is max. possible for 10' deep trench.

20 sq. ft./lineal ft. is max. possible for 12' deep trench.

~~(r)~~ (s)

TABLE IV

SHALLOW TILE FIELD REQUIREMENTS

Time In Minutes for 1" Drop	Length of Tile Drain for Standard 24" Trench		
	18"	24"	36"
Two Bedroom			
1-5	240	210	180
6-10	280	240	210
11-15	304	270	240
16-20	336	300	270
21-30	400	330	300
Three Bedroom			
1-5	288	240	210
6-10	360	300	240
11-15	420	330	270
16-20	504	360	300
21-30	619	450	390
Four Bedroom			
1-5	384	300	270
6-10	480	330	300
11-15	594	390	360
16-20	672	450	420
21-30	799	540	510
Five Bedroom			
1-5	480	420	360
6-10	600	450	420
11-15	720	510	480
16-20	840	570	540
21-30	960	690	600

~~(s)~~ (t)

TABLE V

SEEPAGE PIT (DRYWELL) REQUIREMENTS

Effective absorption area for each 100 gallons of sewage per day - using 2 persons/bedroom and 75 gallons/person/day.

A.

Time in Minutes for 1" Drop	Effective Absorption Area (square feet)
1-5	96
6-10	108
11-15	139
16-20	167
21-30	200

~~(s)~~ (t)

TABLE V (Cont'd.)

B. Vertical Sidewall Area (Sq. Ft.)

Effective Sidewall Area Below Inlet	Inside Diameter of Seepage Pit					
	5'	7'	8'	9'	10'	12'
5	79	110	126	141	157	188
6	94	132	151	170	188	226
7	110	154	176	198	220	264
8	126	176	201	226	251	302
9	141	198	226	254	283	339
10	157	220	251	283	314	377
11	173	242	276	311	345	414
12	188	264	302	339	377	442
13	204	286	326	378	408	490
14	220	308	351	396	440	528
15	235	330	377	425	471	565
16	251	352	402	453	502	603
17	267	374	427			
18	283	396	452			
19	298	418	477			
20	314	440	502			

~~(t)~~ (u)

TABLE VI

MINIMUM CONSTRUCTION REQUIREMENTS

Construction Element	Minimum Requirement
1. Tile Field (Shallow)	
Individual lines per field	22
Individual line, minimum length	550 feet
Individual line, maximum length	1100 feet
Individual trench width, minimum	18 inches
Individual trench width, maximum	36 inches
Individual trench depth, minimum	26 inches
Individual trench depth, maximum	30 inches
Field tile (concrete or perforated	4 inch diameter
Field tile lines, maximum slope	4 inch/100 feet
Minimum depth of stone under tile pipe	12 inches
Minimum cover of stone over the pipe	2 inches
Space between trenches, minimum (on center)	8 feet
Distance of solid earth between trench and distribution box	6 feet
2. Disposal Trench (Deep)	
Lines per field	2
Individual line, maximum length	100 feet
Individual line, minimum length	35 feet
Individual trench width, minimum	12 inches
Individual trench width, maximum	24 inches
Field tile (concrete or perforated)	4 inch diameter
Field tile lines, maximum slope	4 inch/100 feet
Minimum depth of stone under tile pipe	as specified
Minimum cover of stone over tile pipe	2 inches
Space between trenches, minimum (on center)	10 feet
Distance of solid earth between trench and distribution box	6 feet

~~(t)~~ (u) TABLE VI (Cont'd.)

Construction Element	Minimum Requirement
3. Seepage Pit (Drywell)	
Individual drywell, minimum inside block	5 feet diameter
Individual drywell, maximum inside block	10 feet diameter
Space between drywell if more than one	3 x diameter
Distance from distribution box, minimum	5 feet
Minimum clearance from masonry block to sidewall of pit	6 inches
Filter material between drywell and pit sidewall from bottom of pit to inlet pipe	

Section 2. And Be It Further Enacted, that this Act is hereby declared to be an emergency Act and necessary for the immediate preservation of the health, safety and welfare of the citizens of Harford County, Maryland, and shall take effect from the date it becomes law.

Effective: October 31, 1973

BY THE COUNCIL

Read the third time.

Passed OCTOBER 9, 1973 - LSD 73-30 (With Amendments)

~~Failed of Passage~~

By order

Imogene B. Johnston, Secretary

Sealed with the County Seal and presented to the County Executive for his approval this 10TH day of OCTOBER, 1973 at 10:30 o'clock A.M.

Imogene B. Johnston, Secretary

BY THE EXECUTIVE

APPROVED:

Charles B. Anderson, Jr., County Executive

Date 10-31-73

BY THE COUNCIL

THIS BILL, HAVING BEEN APPROVED BY THE EXECUTIVE AND RETURNED TO THE COUNCIL, BECOMES LAW ON OCTOBER 31, 1973.

Imogene B. Johnston
SECRETARY